L. A. CARTER.

TRANSFORMER CASING.

APPLICATION FILED SEPT. 10, 1918.

1,429,927. Patented Sept. 26, 1922.

Fig. 1

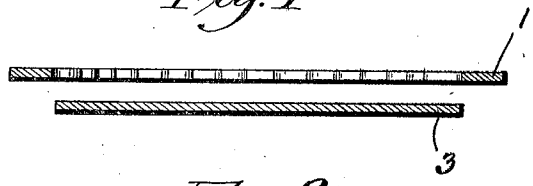


Fig. 2

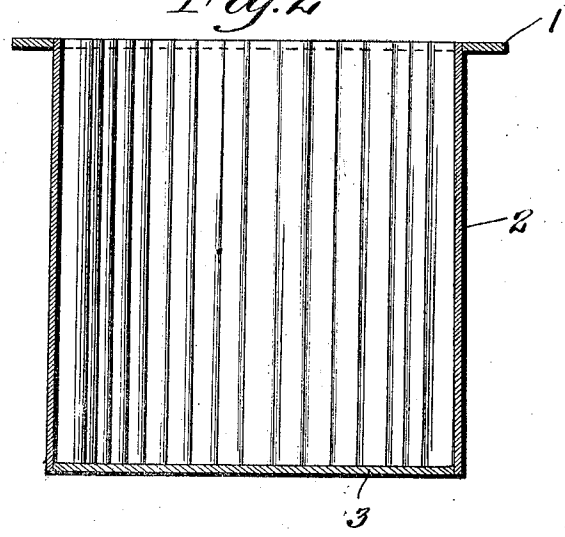


Fig. 5.

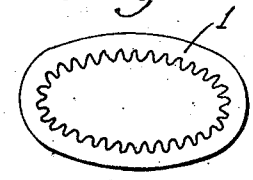


Fig. 4

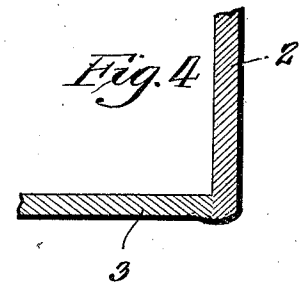


Fig. 3

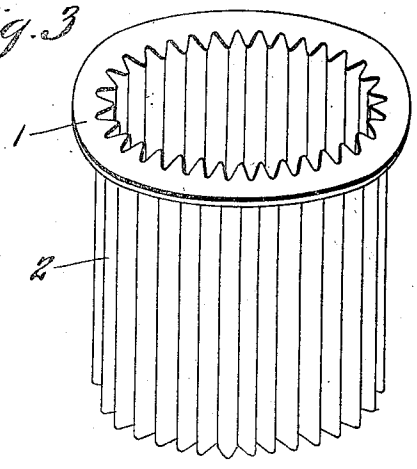
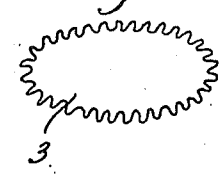


Fig. 6.



Inventor

Lionel A. Carter

By J. M. Thomas, Atty.

Patented Sept. 26, 1922. 1,429,927

UNITED STATES PATENT OFFICE.

LIONEL A. CARTER, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-THIRD TO THOMAS O. MOLONEY AND ONE-THIRD TO JAMES J. MULLEN, BOTH OF ST. LOUIS, MISSOURI.

TRANSFORMER CASING.

Application filed September 10, 1918. Serial No. 253,453.

To all whom it may concern:

Be it known that I, LIONEL A. CARTER, a subject of the King of Great Britain, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Transformer Casings, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which,—

Figure 1 is a sectional view through the top and bottom plates of my improved transformer casing.

Figure 2 is a vertical sectional view through the casing.

Figure 3 is a detail view of the completed casing.

Figure 4 is a sectional view through a portion of the bottom and side walls of the casing.

Figure 5 is a plan view of the top flange showing its inner corrugated edge.

Figure 6 is a plan view of the bottom wall showing its corrugated outer edges in exact registration with the corrugated inner edges of the top flange.

This invention relates to a new and useful improvement in transformer casings, the object being to construct a casing which will have a top outwardly extending flange welded or otherwise secured to the fluted side walls, the bottom of the casing being formed by the material which is cut out in forming said flange, the flange portion and the bottom portion being formed simultaneously from the same blank by a single cutting operation, the flange portion constituting the outer or ring portion and the bottom portion the inner or disk portion of said blank.

To produce a casing of the character described, I preferably proceed in the following manner.

A plate of steel of the requisite size is formed as to its outer contour by cutting, sawing, or by the use of a suitable gas torch or the like. When the plate is so formed, there is a portion removed from the center thereof by pressing, or by the use of a gas torch, the outer edges of the cut out portion containing the contour of the bottom of the casing for which purpose it is to be used; while the remaining or marginal portion of the plate has its inner edge simultaneously shaped to receive the side walls.

The side walls of the casing are preferably fluted to radiate heat and are so proportioned that the upper end of the side walls will fit within the fluted flange to which the side walls are welded by a suitable torch, or soldered, as the case may be. The bottom wall is arranged within the side walls and welded or soldered thereto.

In the drawings, 1 indicates the top flange, 2 the fluted side walls, and 3 the bottom plate or wall which formed at one time an integral part of the top flange but which was severed therefrom by means of a die or suitable gas torch. After being severed, the top flange 1 is soldered or welded to the side walls, while the bottom wall 3 is arranged preferably within the side walls and welded or soldered thereto.

I claim:

1. The process of making transformer casings which consists in forming a fluted side wall member of substantially the same contour throughout its height, then cutting out from a single blank by a single cutting operation along a line which is fluted the bottom wall member and the flange member, so that the inner portion of the flange member and the outer portion of the bottom will match the flutes of said side wall member, and then soldering or welding the bottom wall member within the lower end of said wall member and soldering or welding the flange member to the upper end of said side wall member.

2. The process of making transformer casings which consists in forming a fluted side wall member of substantially the same contour throughout its height, severing a blank by a single cut along a line which is fluted into an inner or disk portion and an outer or ring portion, so that the fluted inner edge of the ring portion and the fluted outer edge of the disk portion will match the flutes of said side wall member securing the inner or disk portion to the lower end of said side wall member to form a bottom therefor, and securing the ring portion to the upper end of said side wall member to form an outwardly projecting flange.

In testimony whereof I hereunto affix my signature, this 5th day of September, 1918.

LIONEL A. CARTER.